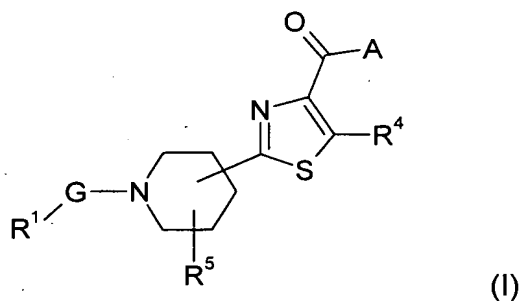


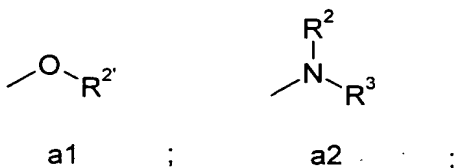
## CLAIMS

- 5 1. Compounds of the formula (I):

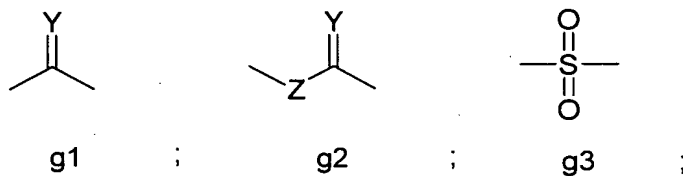


in which:

- A represents a radical chosen from the radicals a1 and a2 below:



- G represents a divalent bond or radical chosen from the groups g1, g2 and g3 below:



- R<sup>1</sup> is chosen from hydrogen and an alkyl, alkenyl, alkynyl, cycloalkyl, heterocycloalkyl, aryl, heteroaryl, alkylcarbonyl or alkoxy carbonyl radical;
- R<sup>2</sup>, R<sup>2'</sup> and R<sup>3</sup>, which may be identical or different, are chosen, independently of each other, from a hydrogen atom, an alkyl, alkenyl, alkynyl, cycloalkyl, heterocycloalkyl, aryl or heteroaryl radical and a radical -NRR'; or

- $R^2$  and  $R^3$  together form, with the nitrogen atom that bears them, a heterocycle;
- $R^4$  and  $R^5$ , which may be identical or different, are chosen, independently of each other, from a hydrogen atom, an alkyl, alkenyl, alkynyl, cycloalkyl, heterocycloalkyl, aryl or heteroaryl radical and a radical -NRR';
- R and R', which may be identical or different, represent, independently of each other, a hydrogen atom or a radical chosen from alkyl, alkenyl, alkynyl, cycloalkyl, heterocycloalkyl, aryl and heteroaryl; or together form, with the nitrogen atom that bears them, a heterocycle, or together form the double bond of an alken-1-yl radical;
- Y represents an oxygen or sulfur atom; and
- Z represents -NH- or an oxygen atom;

the possible geometrical and/or optical isomers, epimers and various tautomeric forms, and possible oxidized forms, especially amine oxides, thereof, the solvates and the hydrates of these compounds;

and also the possible pharmaceutically acceptable salts thereof with an acid or a base, or the pharmaceutically acceptable prodrugs of these compounds.

2. Compounds according to Claim 1, for which the radical  $R^5$  represents hydrogen,

the possible geometrical and/or optical isomers, epimers and various tautomeric forms, and possible oxidized forms, especially amine oxides, thereof, the solvates and the hydrates of these compounds;

and also the possible pharmaceutically acceptable salts thereof with an acid or a base, or the pharmaceutically acceptable prodrugs of these compounds.

3. Compounds according to Claim 1 or Claim 2, for which the radical  $R^4$  represents hydrogen,

the possible geometrical and/or optical isomers, epimers and various tautomeric forms, and possible oxidized forms, especially amine oxides, thereof, the solvates and the hydrates of these compounds;

and also the possible pharmaceutically acceptable salts thereof with an acid or a base, or the pharmaceutically acceptable prodrugs of these compounds.

4. Compounds according to any one of the preceding claims, in which the thiazolyl radical is branched in position 3 or in position 4 of the piperidine nucleus,

the possible geometrical and/or optical isomers, epimers and various tautomeric forms, and possible oxidized forms, especially amine oxides, thereof, the solvates and the hydrates of these compounds;

and also the possible pharmaceutically acceptable salts thereof with an acid or a base, or the pharmaceutically acceptable prodrugs of these compounds.

5. Compounds according to any one of the preceding claims, in which the thiazolyl radical is branched in position 4 of the piperidine nucleus,

the possible geometrical and/or optical isomers, epimers and various tautomeric forms, and possible oxidized forms, especially amine oxides, thereof, the solvates and the hydrates of these compounds;

and also the possible pharmaceutically acceptable salts thereof with an acid or a base, or the pharmaceutically acceptable prodrugs of these compounds.

6. Compounds according to any one of the preceding claims, in which G represents the radical g1,

the possible geometrical and/or optical isomers, epimers and various tautomeric forms, and possible oxidized forms, especially amine oxides, thereof, the solvates and the hydrates of these compounds;

and also the possible pharmaceutically acceptable salts thereof with an acid or a base, or the pharmaceutically acceptable prodrugs of these compounds.

7. Compounds according to any one of the preceding claims, in which G represents the radical g1 and Y represents an oxygen atom,

the possible geometrical and/or optical isomers, epimers and various tautomeric forms, and possible oxidized forms, especially amine oxides, thereof,  
5 the solvates and the hydrates of these compounds;

and also the possible pharmaceutically acceptable salts thereof with an acid or a base, or the pharmaceutically acceptable prodrugs of these compounds.

8. Compounds according to any one of the preceding claims, in which  
10 the radical R<sup>4</sup> represents hydrogen, the radical R<sup>5</sup> represents hydrogen, the thiazolyl radical is branched in position 4 of the piperidine nucleus, and G represents the radical g1 in which Y represents an oxygen atom,

the possible geometrical and/or optical isomers, epimers and various tautomeric forms, and possible oxidized forms, especially amine oxides, thereof,  
15 the solvates and the hydrates of these compounds;

and also the possible pharmaceutically acceptable salts thereof with an acid or a base, or the pharmaceutically acceptable prodrugs of these compounds.

9. Compounds according to any one of the preceding claims, in which  
20 R<sup>1</sup> represents an aryl radical, especially phenyl, substituted by one or more aryl and/or alkyl radicals,

the possible geometrical and/or optical isomers, epimers and various tautomeric forms, and possible oxidized forms, especially amine oxides, thereof, the solvates and the hydrates of these compounds;

25 and also the possible pharmaceutically acceptable salts thereof with an acid or a base, or the pharmaceutically acceptable prodrugs of these compounds.

10. Compounds according to any one of the preceding claims, in which  
30 R<sup>1</sup> represents a biphenyl radical, optionally substituted by one or more alkyl radicals, preferably methyl, ethyl or propyl, and/or with a perhaloalkyl or perhaloalkoxy radical,

the possible geometrical and/or optical isomers, epimers and various tautomeric forms, and possible oxidized forms, especially amine oxides, thereof, the solvates and the hydrates of these compounds;

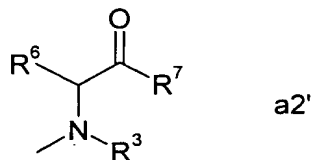
and also the possible pharmaceutically acceptable salts thereof with an acid or a base, or the pharmaceutically acceptable prodrugs of these compounds.

11. Compounds according to any one of the preceding claims, in which A represents a2,

the possible geometrical and/or optical isomers, epimers and various tautomeric forms, and possible oxidized forms, especially amine oxides, thereof, the solvates and the hydrates of these compounds;

and also the possible pharmaceutically acceptable salts thereof with an acid or a base, or the pharmaceutically acceptable prodrugs of these compounds.

12. Compounds according to any one of the preceding claims, in which A represents a radical of the formula a2' below:



in which R<sup>6</sup> and R<sup>7</sup>, which may be identical or different, and independently of each other, have the same definitions as the radicals R<sup>2</sup> and R<sup>3</sup> defined in Claim 1, the other substituents having the same definitions as those given above,

the possible geometrical and/or optical isomers, epimers and various tautomeric forms, and possible oxidized forms, especially amine oxides, thereof, the solvates and the hydrates of these compounds;

and also the possible pharmaceutically acceptable salts thereof with an acid or a base, or the pharmaceutically acceptable prodrugs of these compounds.

13. Compounds according to any one of the preceding claims, in which G represents the radical g1, with Y representing an oxygen atom, R<sup>1</sup> represents a biphenyl radical, optionally substituted by one or more alkyl radicals, preferably

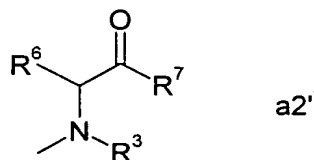
methyl, ethyl or propyl, and/or a trifluoromethyl or trifluoromethoxy radical, and A represents a2,

the other substituents being as defined above,

the possible geometrical and/or optical isomers, epimers and various  
5 tautomeric forms, and possible oxidized forms, especially amine oxides, thereof, the solvates and the hydrates of these compounds;

and also the possible pharmaceutically acceptable salts thereof with an acid or a base, or the pharmaceutically acceptable prodrugs of these compounds.

10 **14.** Compounds according to any one of the preceding claims, in which G represents the radical g1, with Y representing an oxygen atom, R<sup>1</sup> represents a biphenyl radical, optionally substituted by one or more alkyl radicals, preferably methyl, ethyl or propyl, and/or a trifluoromethyl or trifluoromethoxy radical, and A represents a2' of the formula:



15 in which R<sup>6</sup> and R<sup>7</sup>, which may be identical or different, and independently of each other, have the same definitions as the radicals R<sup>2</sup> and R<sup>3</sup> defined in Claim 1, the other substituents being as defined above,

the possible geometrical and/or optical isomers, epimers and various  
20 tautomeric forms, and possible oxidized forms, especially amine oxides, thereof, the solvates and the hydrates of these compounds;

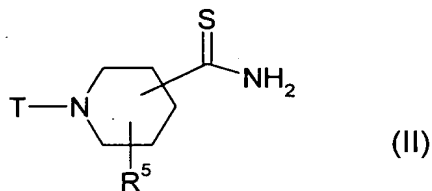
and also the possible pharmaceutically acceptable salts thereof with an acid or a base, or the pharmaceutically acceptable prodrugs of these compounds.

25 **15.** Compounds according to any one of the preceding claims, chosen from:

- N-ethyl-N-(1-methyl-2-oxo-2-phenylethyl) 2-[1-(4'-trifluoromethyl-biphenyl-2-carbonyl)piperid-4-yl]thiazole-4-carbamate;

- N-ethyl-N-(1-methyl-2-oxo-2-pyrid-3-ylethyl) 2-[1-(4'-trifluoromethylbiphenyl-2-carbonyl)piperid-4-yl]thiazole-4-carbamate;
  - N-ethyl-N-(1-methyl-2-oxo-2-phenylethyl) 2-[1-(6-methyl-4'-trifluoromethoxybiphenyl-2-carbonyl)piperid-4-yl]thiazole-4-carbamate;
  - 5        - N-ethyl-N-(1-methyl-2-oxo-2-pyrid-2-ylethyl) 2-[1-(6-methyl-4'-trifluoromethoxybiphenyl-2-carbonyl)piperid-4-yl]thiazole-4-carbamate.
  - N-[cyano(4-fluorophenyl)methyl]-N-phenyl-2-[1-(4'-trifluoromethylbiphenyl-2-carbonyl)piperid-4-yl]thiazole-4-carboxamide ;
  - N-( $\alpha$ -cyanobenzyl)-N-ethyl-2-[1-(4'-trifluoromethylbiphenyl-2-carbonyl)piperid-4-yl]thiazole-4-carboxamide ;
  - 10       - 2-{1-{4'-(trifluoromethyl)-1,1'-biphenyl-2-yl}carboxyl}piperid-4-yl}-1,3-thiazole-4-carboxylic acid
  - 1-(4-{4-(3-hydroxypiperid-1-yl)methanoyl}thiazol-2-yl)piperid-1-yl)-1-(4'-trifluoromethylbiphenyl-2-yl)methanone
  - 15       - N-methyl-N-(1-methyl-2-oxo-2-phenethyl)-2-[1-(4'-trifluoromethylbiphenyl-2-carbonyl)piperid-4-yl]thiazole-4-carboxamide
  - N-methyl-N-(1-methyl-2-oxo-2(S)-phenethyl)-2-[1-(4'-trifluoromethylbiphenyl-2-carbonyl)piperid-4-yl]thiazole-4-carboxamide
  - N-(7-oxo-7H-thieno[3,2-b]pyran-6-yl)-2-[1-(4'-trifluoromethylbiphenyl-2-carbonyl)piperid-4-yl]thiazole-4-carboxamide
  - 20       - N-(2-methyl-4-oxo-4H-chromen-3-yl)-2-[1-(6-methyl-4'-trifluoromethoxybiphenyl-2-carbonyl)piperid-4-yl]thiazole-4-carboxamide
  - N-( $\alpha$ -cyanobenzyl)-N-isopropyl-2-[1-(4'-trifluoromethylbiphenyl-2-carbonyl)piperid-4-yl]thiazole-4-carboxamide ; and
  - 25       - N-[1-cyano-1-(pyrid-4-yl)methyl]-N-isopropyl-2-[1-(4'-trifluoromethylbiphenyl-2-carbonyl)piperid-4-yl]thiazole-4-carboxamide;
- the optical isomers thereof, oxidized forms, solvates and hydrates of these compounds;
- and also the possible pharmaceutically acceptable salts thereof with an acid, or
- 30       the pharmaceutically acceptable prodrugs of these compounds.

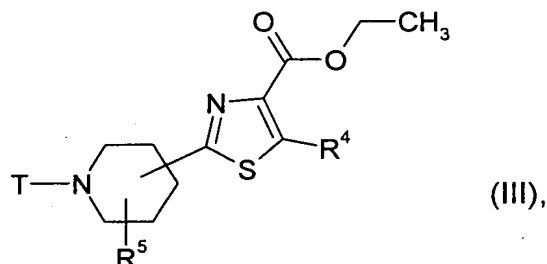
16. Process for the preparation of a compound according to any one of Claims 1 to 15, characterized in that a compound of the formula (II):



in which T represents a labile protecting group, and R<sup>5</sup> is as defined in Claim 1,

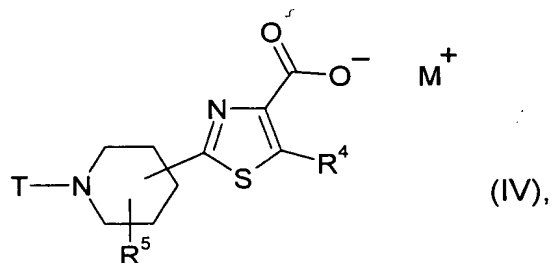
is reacted with ethyl R<sup>4</sup>-bromopyruvate, generally in equimolar proportions, in a polar solvent, in the presence of an excess of base, preferably an organic base, at a suitable temperature, for a time ranging from 1 to 40 hours and preferably between 4 and 18 hours,

so as to form the thiazolyl ring and give the compound of the formula (III):



in which T is as defined above and R<sup>4</sup> and R<sup>5</sup> are as defined in Claim 1,

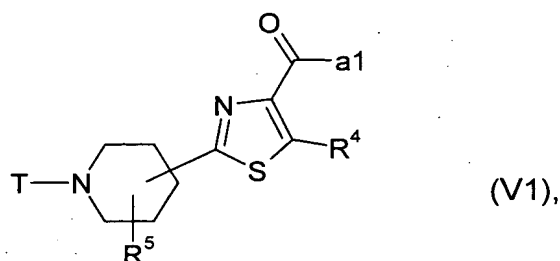
which compound of the formula (III) is then saponified with a base, of alkali metal or alkaline-earth metal hydroxide type, in polar medium, at room temperature, for a time ranging from 1 to 12 hours, so as to form the salt of the formula (IV):





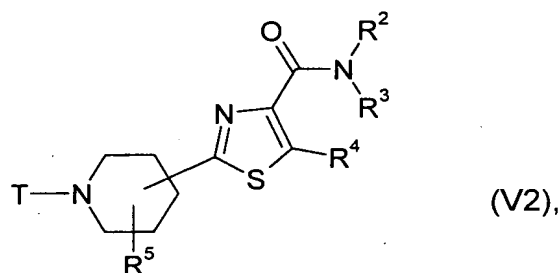
in which T, R<sup>4</sup> and R<sup>5</sup> are as defined above, and M<sup>+</sup> represents the alkali metal or alkaline-earth metal cation derived from the base that is useful for the saponification reaction,

which compound of the formula (IV) is next hydrolysed and then/or esterified to a compound of the formula (V1):



in which R<sup>4</sup>, R<sup>5</sup>, a1 and T are as defined above,

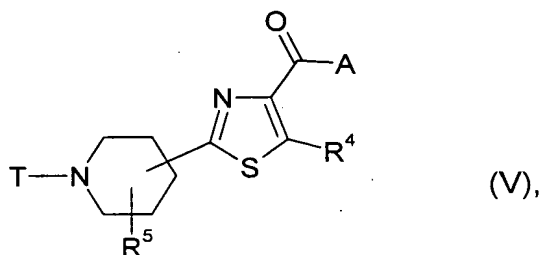
or converted into the corresponding amide of the formula (V2):



10 in which R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup> and T are as defined above,

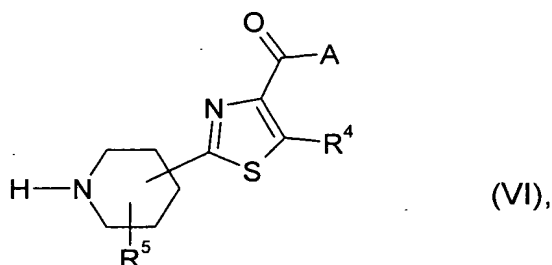
via the action of an amine of the formula HNR<sup>2</sup>R<sup>3</sup>, in the presence of a base and a catalyst, in a polar aprotic solvent, at room temperature, for a time that can range from 1 to 50 hours.

the compounds of the formulae (V1) and (V2) together forming the compound of the formula (V):



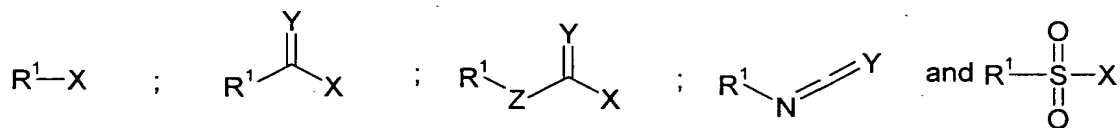
in which R<sup>4</sup>, R<sup>5</sup>, A and T are as defined above,

which compound of the formula (V) is then used in a reaction for deprotection of the amine function of the piperidine ring, via the action of an organic or mineral acid, in dichloromethane or dioxane medium, at room temperature, for a time ranging from a few minutes to a few hours, generally ranging from five minutes to 12 hours, to give the compound of the formula (VI):



which is a special case of the compounds of the formula (I), in which  $R^1$  represents hydrogen, G represents a bond, A,  $R^4$  and  $R^5$  being as defined above,

which is then subjected to the action of a compound chosen from:



in which X represents a halogen atom, preferably chlorine,  $R^1$ , Y and Z being as defined in Claim 1,

in the presence of a base, preferably an organic base, and a catalyst, in a polar aprotic solvent, at room temperature, for a time that can range from 1 to 50 hours,

to give the compound of the formula (I) as defined in Claim 1.

**17.** Pharmaceutical composition comprising a pharmaceutically effective amount of a compound of the formula (I) according to any one of Claims 1 to 15 or obtained via a process according to Claim 16, in combination with one or more pharmaceutically acceptable vehicles.

**18.** Use of a compound of the formula (I) according to any one of Claims 1 to 15 or obtained via a process according to Claim 16, for the preparation of a medicament for the treatment of hypertriglyceridaemia, hypercholesterolaemia and

dyslipidaemia associated with diabetes, and also for the prevention of and treating obesity.